



**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
Form PTO-1449 (Modified)
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COMPLETE IF KNOWN

Application Number	10/080,915
Confirmation Number	7799
Filing Date	February 22, 2002
First Named Inventor	Randy Harris
Group Art Unit	1742
Examiner Name	Donald R. Valentine
Attorney Docket No.	29195-8173US1

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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	U.S. Patent or Application		Name of Patentee or Inventor of Cited Document	Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		NUMBER	Kind Code (if known)			
HW		US2001/0032788		Woodruff et al.	10/25/01	
HW		US2001/0043856		Woodruff et al.	11/22/01	
HW		US2002/0008037		Wilson et al.	01/24/02	
HW		US2002/0032499		Wilson et al.	03/14/02	
NW		US2002/0096508		Weaver et al.	07/25/02	
NW		US2002/0102156		Woodruff et al.	08/01/02	
HW		US2002/0125141		Wilson et al.	09/12/02	
HW		US2002/0139678		Wilson et al.	10/03/02	
HW		US2003/0127337		Hanson et al.	07/10/03	
HW		US2003/0141185		Wilson et al.	07/31/03	
HW		US2003/0159277		Harris et al.	08/28/03	
HW		US2003/0159921		Harris et al.	08/28/03	
HW		5,372,293		Corlay et al.	12/13/94	
HW		5,509,772		Doche	04/23/96	
HW		6,080,291		Woodruff et al.	06/27/00	
HW		6,080,691		Lindsay et al.	06/27/00	
HW		6,091,498		Hanson et al.	07/18/00	
HW		6,228,232		Woodruff et al.	05/08/01	
HW		6,270,647		Graham et al.	08/07/01	
HW		6,280,583		Woodruff et al.	08/28/01	
HW		6,288,561		Leedy	09/11/01	
HW		6,303,010		Woodruff et al.	10/16/01	
HW		6,309,520		Woodruff et al.	10/30/01	
HW		6,309,524		Woodruff et al.	10/30/01	
HW		6,471,913		Weaver et al.	10/29/02	
HW		6,569,297		Wilson et al.	05/27/03	

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		Office	NUMBER	Kind Code (if known)				
HW		WO	99/47731		Semitool, Inc.	09/23/99		
NW		WO	99/46065		Semitool, Inc.	09/16/99		
HW		WO	00/61837		Semitool, Inc.	01/20/00		
HW		WO	00/02675		Semitool, Inc.	10/19/00		
HW		WO	00/61498		Semitool, Inc.	10/19/00		
HW		WO	02/04886		Semitool, Inc.	01/17/02		

OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published.	T

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Gary S. Will

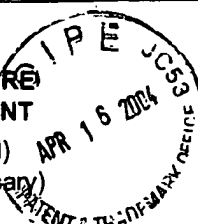
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		NUMBER	Kind Code (if known)			
HW		09/679,928		Woodruff et al.	10/05/00	
I		60/129,055		McHugh	04/13/99	
I		60/143,769		McHugh	07/12/99	
I		60/182,160		McHugh et al.	02/14/00	
HW		60/206,663		Wilson et al.	05/24/00	
HW		1,526,644		Phinney	02/17/25	
HW		1,881,713		Laukel	10/11/32	
HW		2,256,274		Boedecker et al.	09/16/41	
HW		4,046,105		Gomez	09/06/77	
HW		4,304,641		Grandia et al.	12/08/81	
HW		4,451,197		Lange	05/29/84	
HW		4,495,453		Inaba et al.	01/22/85	
HW		4,566,847		Maeda et al.	01/28/86	
HW		4,568,234		Lee et al.	02/04/86	
HW		4,634,503		Nogavich	01/06/87	
HW		4,639,028		Olson	01/27/87	
HW		4,648,944		George et al.	03/10/87	
HW		4,670,126		Messer et al.	06/02/87	
HW		4,760,671		Ward	08/02/88	
HW		4,761,214		Hinman	08/02/88	
HW		4,770,590		Hughes et al.	09/13/88	
HW		4,828,654		Reed	05/09/89	
HW		4,902,398		Homstad	02/20/90	
HW		4,944,650		Masumoto	07/31/90	
HW		4,949,671		Davis et al.	08/21/90	
HW		4,988,533		Freeman et al.	01/29/91	

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Harry S. Will, III

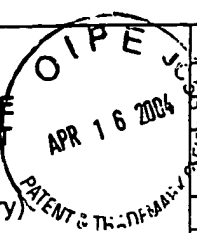
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		NUMBER	Kind Code (if known)			
HW		5,000,827		Schuster et al.	03/19/91	
HW		5,061,144		Akimoto et al.	10/29/91	
HW		5,064,337		Asakawa et al.	11/12/91	
HW		5,135,636		Yee et al.	08/04/92	
HW		5,138,973		Davis et al.	08/18/92	
HW		5,156,174		Thompson et al.	10/20/92	
HW		5,156,730		Bhatt et al.	10/20/92	
HW		5,178,512		Skrobak	01/12/93	
HW		5,217,586		Datta et al.	06/08/93	
HW		5,222,310		Thompson et al.	06/29/93	
HW		5,227,041		Brogden et al.	07/13/93	
HW		5,232,328		Owczarz et al.	08/03/93	
HW		5,256,274		Poris	10/26/93	
HW		5,314,294		Taniguchi et al.	05/24/94	
HW		5,344,491		Katou	09/06/94	
HW		5,368,711		Poris	11/29/94	
HW		5,376,176		Kuriyama	12/27/94	
HW		5,377,708		Bergman et al.	01/03/95	
HW		5,378,145		Ono et al.	01/03/95	
HW		5,460,478		Akimoto et al.	10/24/95	
HW		5,544,421		Thompson et al.	08/13/96	
HW		5,639,206		Oda et al.	06/17/97	
HW		5,670,034		Lowery	09/23/97	
HW		5,681,392		Swain	10/28/97	
HW		5,684,713		Asada et al.	11/04/97	
HW		5,700,127		Harada et al.	12/23/97	

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		NUMBER	Kind Code (if known)			
HW		5,711,646		Ueda et al.	01/27/98	
		5,723,028		Poris	03/03/98	
		5,731,678		Zila et al.	03/24/98	
		5,746,565		Tepolt	05/05/98	
		5,754,842		Minagawa	05/19/98	
		5,759,006		Miyamoto et al.	06/02/98	
		5,765,444		Bacchi et al.	06/16/98	
		5,765,889		Nam et al.	06/16/98	
		5,785,826		Greenspan	07/28/98	
		5,980,706		Bleck et al.	11/09/99	
		5,985,126		Bleck et al.	11/16/99	
		5,989,397		Laube et al.	11/23/99	
		5,999,886		Martin et al.	12/07/99	
		6,004,828		Hanson	12/21/99	
		6,027,631		Broadbent	02/22/00	
		6,028,986		Song	02/22/00	
HW		6,074,544		Reid et al.	06/13/00	
HW		6,090,260		Inoue et al.	07/18/00	
HW		6,110,346		Reid et al.	08/29/00	
HW		6,151,532		Barone et al.	11/21/00	
HW		6,156,167		Patton et al.	12/05/00	
HW		6,159,354		Contolini et al.	12/12/00	
HW		6,162,344		Reid et al.	12/19/00	
HW		6,162,488		Gevelber et al.	12/19/00	
HW		6,168,695		Woodruff et al.	01/02/01	
HW		6,179,983		Reid et al.	01/30/01	

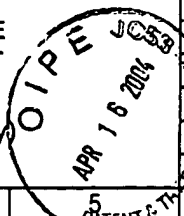
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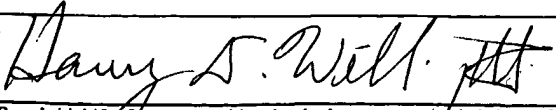
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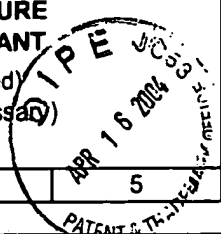
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		NUMBER	Kind Code (if known)			
HW		6,193,859		Contolini et al.	02/27/01	
HW		6,199,301		Wallace	03/13/01	
HW		6,234,738		Kimata et al.	05/22/01	
HW		6,322,677		Duncan Woodruff et al	11/27/01	
HW		6,391,166		Wang	05/21/02	

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		Office	NUMBER	Kind Code (if known)				
PW		WO	00/02808		Semitool, Inc.	01/20/00		
		WO	00/61498		Semitool, Inc.	10/19/00		
		WO	00/61837		Semitool, Inc.	10/19/00		
HW		WO	01/90434		Semitool, Inc.	11/29/01		
HW		WO	02/097165		Semitool, Inc.	12/05/02		
HW		WO	02/099165		Semitool, Inc.	12/12/02		

OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS			
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HW		LEE, TIEN-YU TOM et al., "Application of a CFD Tool in Designing a Fountain Plating Cell for Uniform Bump Plating of Semiconductor Wafers," IEEE Transactions On Components, Packaging and Manufacturing Technology - Part B, February 1996, pp 131-137, Vol 19, No. 1, IEEE	
HW		MAGNUM, "The perfect partnership of process excellence and production control in a fully-automated platform," (1996), pp 1-12, Semitool, Inc.	

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KW		RITTER, G., et al., "Two-And Three-Dimensional Numerical Modeling of Copper Electroplating for Advanced ULSI Metallization," June 1999, 13 pgs, E-MRS Conference Symposium M. <i>Basic Models to Enhance Reliability</i> , Strasbourg, France	

EXAMINER	<i>Harry S. Will; III</i>	DATE CONSIDERED	<i>3/17/05</i>
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